

Title (en)

EVAPORATOR AND/OR CONDENSER ELEMENT WITH SUPERFICIALLY EMBEDDED POROUS PARTICLES

Title (de)

VERDAMPFER- UND/ODER KONDENSATORELEMENT MIT OBERFLÄCHLICH EINGEBETTETEN PORÖSEN PARTIKELN

Title (fr)

ÉLÉMENT D'ÉVAPORATEUR ET/OU DE CONDENSEUR PRÉSENTANT DES PARTICULES POREUSES NOYÉES EN SURFACE

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Application

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Abstract (en)

[origin: WO2017202820A1] The present invention relates to an evaporator and/or condenser element which has a substrate structure (1) composed of a thermally conductive material with a surface for the evaporation or sublimation or condensation or resublimation of a liquid or solid medium. Particles (2) composed of a porous material are embedded into the surface of the substrate structure (1) so as to partially project out of said surface. In this way, a reduction of the required evaporation superheating temperature, an increase of the volume-specific and mass-specific evaporation and condensation performance, and an increased volume-specific refrigerant storage capacity are achieved.

IPC 8 full level

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